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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/829,133 | 04/09/2001 | Erol Tan | RAY4066P0016US | 1047 |

32116 7590 06/23/2003

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER
500 W. MADISON STREET
SUITE 3800
CHICAGO, IL 60661

EXAMINER

PRATT, CHRISTOPHER C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1771

DATE MAILED: 06/23/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/829,133

Applicant(s)

TAN ET AL.

Examiner

Christopher C Pratt

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-14,18,21,25,30-32,34,35,39,45 and 48 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 12-14,18,21,25,30-32,34,35,39,45 and 48 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/341,340.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-6,9. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-14, 18, 21, 25, 30-32, 34-35, 39, 45, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leithem (WO 95/20066) in view of Berg et al (4685909) and Tyler et al (4919681).

Leithem is concerned with the creation of an absorbent material consisting essentially of a nonwoven mixture of pulp fibers and superabsorbent polymer (p. 7, lines 6-8). Leithem teaches a kappa value below 100 (example 3). Leithem is silent with respect to the ratio of pulp to superabsorbent and density of the fabric.

Berg is concerned with the creation of a nonwoven fabric comprising a mixture of superabsorbent polymer and pulp fibers (col. 4, lines 45-49). Berg teaches applicant's claimed ratio of superabsorbent to pulp (col. 6, lines 36-38). Berg also teaches applicant's claimed density (col. 6, lines 53-62). It would have been obvious to a person having ordinary skill in the art to fill in the gaps in Leithem's teachings with those of Berg. The skilled artisan would have been motivated to utilize the ratio and density taught by Berg by the desire to improve the absorptive capability of Leithem's fabric.

Leithem is silent with respect to the crystallinity of the fibers. Tyler is concerned with the creation of a nonwoven cellulosic fabric (abstract). Tyler teaches that reduced

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crystallinity increases absorptive capability (col. 2, lines 48-51). If Leithem's crystallinity is not inherently below 65% then it would have been obvious to a person having ordinary skill in the art to decrease the crystallinity of Leithem's cellulosic fibers in order to increase absorption.

With respect to applicant's claimed suppleness, drying power, and wicking energy, Leithem does not specifically refer to these properties. However, because the fabric created by the combination set forth above utilizes the same materials in the same proportions as the fabric of the instant claims, these properties are inherent in said combination.

In the alternative, it would have been obvious to a person having ordinary skill in the art to increase suppleness, drying power, and wicking energy. The skilled artisan would have been motivated to increase these properties by the desire to optimize the tactile properties and absorbency of the fabric.

With respect to claim 25, Leithem teaches applicant's claimed process of treating pulp fibers (p. 4, lines 11-24).

With respect to basis weight, it would have been well within the level of ordinary skill in the art to reduce the size of the absorbent material. The skilled artisan would have been motivated to reduce the size of the fabric in order to render the material suitable for smaller applications.

Conclusion


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Pratt whose telephone number is 703-305-6559. The examiner can normally be reached on Monday - Friday from 7 am to 4 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Christopher C. Pratt
June 16, 2003


6/16/2003